

ORIGINAL

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FILED/ACCEPTED

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Federal Communications Commission  
Office of the Secretary

In the Matter of )  
 )  
Globalstar, Inc. Petition for Rulemaking to ) RM-11685  
Reform the Commission's Regulatory )  
Framework for Terrestrial Use of the Big )  
LEO MSS Band )

**REPLY OF IRIDIUM CONSTELLATION LLC**

Iridium Constellation LLC ("Iridium") hereby submits its Reply to the record compiled in the above-captioned proceeding. For the reasons articulated in Iridium's January 14, 2013 Opposition,<sup>1</sup> and detailed in the various comments submitted in this proceeding, the Federal Communications Commission ("Commission") should reject the Petition for Rulemaking filed by Globalstar on November 13, 2012.<sup>2</sup>

**I. INTRODUCTION**

As explained in Iridium's Opposition, the Globalstar Petition is inconsistent with the core purposes of the Big LEO band and should be rejected. The mobile satellite service ("MSS") provides important public interest benefits that cannot be achieved by any other form of communication. Iridium, in particular, is dedicated to serving the high-bandwidth satellite needs of first responders, U.S. military, U.S. government, consumers, businesses, maritime users, machine-to-machine ("M2M") applications, and users in rural or remote areas. The Big LEO band is one of the last remaining bands entirely dedicated to providing robust, nationwide MSS.

<sup>1</sup> Opposition of Iridium Constellation LLC, RM-11685 (filed Jan. 14, 2013).

<sup>2</sup> Globalstar Inc., Petition for Rulemaking to Reform the Commission's Regulatory Framework for Terrestrial Use of the Big LEO MSS Band, RM-11685 (filed Nov. 13, 2012) ("Globalstar Petition").

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Globalstar's proposal, however, by seeking to repurpose this band for terrestrial use, would remove this last bastion of true MSS that is critically important to the country, especially during natural or man-made emergencies and disasters.

The record in this proceeding demonstrates broad support for the key points of Iridium's opposition. Specifically, commenters agree that the Commission should preserve and protect MSS operations in the Big LEO band, including by maintaining the key protections of the Commission's Ancillary Terrestrial Component ("ATC") rules. Additionally, nearly every commenter observed the Globalstar's petition lacked sufficient detail to support a full evaluation of its proposals. This absence of essential information is particularly egregious because the record demonstrates clearly that Globalstar's LTE proposal raises serious spectrum interference concerns. Consequently, Globalstar's Petition should be summarily rejected.

## **II. THE COMMENTS CONFIRM THAT THE COMMISSION SHOULD PRESERVE AND PROTECT MSS IN THE BIG LEO BAND.**

Iridium explained in detail in its Opposition that the Big LEO MSS band is one of the last bastions for critical MSS communications, which are essential to first responders, U.S. military, U.S. government, and other users, and therefore the Commission should make the preservation and protection of these services its top priority in this proceeding. The record is strong and clear on the importance of preserving and supporting vital MSS operations in the Big LEO band. As Iridium and others have pointed out, maintaining the important protections of the ATC gating criteria will be key.

As MSUA suggested, the Commission must take a "band-specific" approach to the Big LEO band and ensure that any terrestrial services offered by Globalstar do not cause interference

to existing and planned satellite services in the Big LEO band.<sup>3</sup> Like Iridium, MSUA highlighted the “very substantial and critical use of the L-band and Big LEO bands for Mobile Satellite Services,” which the Commission must take into account in this proceeding.<sup>4</sup> The Commission previously has recognized “the importance of maintaining MSS to provide services, for example, to public safety and Federal government agencies, to rural areas, and during natural disasters.”<sup>5</sup> In light of this fact, Iridium agrees with MSUA that the Commission should “ensure that operators continue to provide MSS services in the L-band and Big LEO band to meet these critical needs.”<sup>6</sup>

Key to ensuring the continued availability and vitality of MSS in the Big LEO band will be preserving the ATC rules. Particularly now, with so many other former MSS operators rededicating themselves to terrestrial services, the Commission should not eliminate these crucial protections in the Big LEO band. In particular, MSUA emphasizes that however the Commission proceeds, Globalstar should not be relieved of its core obligation to continue providing a “substantial” satellite service.<sup>7</sup> Iridium agrees with MSUA that without this requirement “there is a risk that at some point in the future the terrestrial spectrum rights could be decoupled from Globalstar’s satellite system,” potentially causing interference to existing satellite operations and enabling Globalstar to abandon the satellite business altogether.

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<sup>3</sup> Comments of the Mobile Satellite Users Association at 1, RM-11685 (filed Jan. 14, 2013) (“MSUA Comments”).

<sup>4</sup> *Id.* at 1.

<sup>5</sup> See Fixed and Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz, *Notice of Proposed Rulemaking and Notice of Inquiry*, 25 FCC Rcd 9481, ¶ 4 (2010) (“MSS NPRM and NOI”).

<sup>6</sup> MSUA Comments at 1.

<sup>7</sup> *Id.* at 2.

Clearwire also discussed the important role of the ATC rules in terms of ensuring that terrestrial use of satellite spectrum does not cause harmful interference to other services.<sup>8</sup> As Clearwire points out, Globalstar seeks to delete without discussion a crucial interference protection contained in Section 25.255 of the Commission's rules.<sup>9</sup> This rule, which states that if ancillary MSS ATC operations cause harmful interference to other services, the MSS ATC operator must resolve the interference,<sup>10</sup> is essential to ensuring that terrestrial uses of this spectrum rightfully remain ancillary to satellite.

### **III. THE COMMENTS CONCUR THAT GLOBALSTAR PROVIDED INSUFFICIENT INFORMATION TO SUPPORT A RULEMAKING.**

As explained by Iridium and nearly every other commenter, the Globalstar Petition contained insufficient information to evaluate its proposals. Iridium agrees with Clearwire and others that explain Globalstar bears the burden of offering sufficient detail,<sup>11</sup> pursuant to Section 1.401(c) of the Commission's rules.<sup>12</sup> Under Commission rules and precedent, a petition must "set forth the text or substance of the proposed rule, amendment, or rule to be repealed, together with all facts, views, arguments and data deemed to support the action requested" and include more than "conjecture or mere general observation."<sup>13</sup> Globalstar has not met this burden.

The record reflects that Globalstar's Petition lacks even the most fundamental information about its proposals. As EIBASS correctly states, "[i]t is unclear to EIBASS if Globalstar is proposing space-to-Earth downlinking to terrestrial mobile handsets, high-power terrestrial base stations communicating with terrestrial mobile handsets, low-power fixed or

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<sup>8</sup> Comments of Clearwire Corporation at 21-23, RM-11685 (filed Jan. 14, 2013) ("Clearwire Comments").

<sup>9</sup> *Id.* at 25.

<sup>10</sup> 47 C.F.R. § 25.255.

<sup>11</sup> *See*, Clearwire Comments at 16.

<sup>12</sup> 47 C.F.R. § 1.401(c).

<sup>13</sup> *Newark, NJ*, 29 RR 2d 1473 (1974).

itinerant base stations communicating with mobile handsets, or other consumer premises equipment devices; or some combination of all four scenarios.”<sup>14</sup> Iridium shares this confusion, and this underscores the fact that there simply is not sufficient detail in the Petition to justify commencing a rulemaking.

The record shows that such significant and basic questions are left unanswered about Globalstar’s plans that there is no basis for the Commission to issue a notice of proposed rulemaking. As Clearwire explains, Globalstar has not provided sufficient information “about the architecture, base stations, user equipment, and interference-mitigation measures of either proposed system configuration.”<sup>15</sup> Clearwire concludes therefore that “Globalstar’s TLPS and FDD LTE concepts for the Big LEO Band lack the critical system parameters and empirical data necessary to produce a notice of proposed rulemaking capable of generating informed commentary from the public.”<sup>16</sup>

Most troubling is the complete disregard in Globalstar’s Petition for the concerns of MSS. Indeed, as Clearwire notes, “[b]eyond acknowledging in a footnote that Iridium, a competing satellite service provider, is authorized to share spectrum with Globalstar at 1617.775-1618.725 MHz, Globalstar never mentions how FDD LTE service will affect Iridium’s Big LEO satellite service.”<sup>17</sup> Perhaps even stranger, however, as Clearwire points out, is that Globalstar provides no information demonstrating how its own MSS system will be able to operate in times of emergency after its terrestrial network is deployed.

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<sup>14</sup> Comments of Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) at 7, RM-11685 (filed Jan. 14, 2013).

<sup>15</sup> Clearwire Comments at 2.

<sup>16</sup> *Id.* at 6.

<sup>17</sup> *Id.* at 28-29.

Although Iridium has taken no position on Globalstar's TLPS notion, the LTE proposal raises special concerns about the potential for harmful interference to MSS that have not been addressed. As Iridium explained in its Opposition, introducing terrestrial mobile broadband operations into a satellite spectrum band would put MSS operations at risk and hinder the existing and future ability of Big LEO providers to serve first responders, public safety users, and other subscribers. The Commission has previously recognized the serious challenges raised by same-band sharing between terrestrial and satellite services, most recently in the *AWS-4 Order*.<sup>18</sup> Globalstar completely disregards these challenges and neglects to provide even the most basic information about its proposal to introduce LTE to the 1.6 GHz band. Because this proposal is too vague to provide any basis for the commencement of a rulemaking, it should be rejected.

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<sup>18</sup> Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-220 MHz Bands, *Report and Order and Order of Proposed Modification*, FCC 12-151, ¶ 181 (rel. Dec. 17, 2012).

#### IV. CONCLUSION

The Globalstar Petition is at odds with the fundamental purpose of the Big LEO band, which provides essential MSS to first responders, U.S. military, U.S. government, and commercial users. The record in this proceeding offers strong support for the key positions taken in Iridium's Opposition. Namely, the Commission should make the preservation and protection of MSS its main priority in this proceeding, including by maintaining the protections of the ATC rules. Additionally, Globalstar's Petition is so vague as to be defective. Importantly, the Petition omits any serious discussion of the consequences for MSS of its proposals, including the extremely concerning proposal to introduce LTE mobile broadband operations into a satellite spectrum band. The record makes clear that Globalstar's petition must be rejected.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I, Jackie Martin, do hereby certify that on this 29th day of January 2013, I caused copies of the foregoing "Reply of Iridium Constellation LLC" to be delivered to the following via First Class U.S. mail or email:

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